

# EAST SEARCH 09/23/2007 TLM

|    | Type | Ref # | Hits | Search Text             | DBs                                      |
|----|------|-------|------|-------------------------|--|
| 1  | BRS  | S1    | 1902 | processor pipeline swap | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 2  | BRS  | S2    | 1    | "6900668".PN.           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 3  | BRS  | S3    | 1707 | S1 register             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 4  | BRS  | S4    | 470  | S3 restore              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 5  | BRS  | S5    | 412  | S4 save                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 6  | BRS  | S6    | 332  | S5 delay\$4             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 7  | BRS  | S8    | 53   | S7 thread\$2            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 8  | BRS  | S9    | 1    | S8 swap.AB.             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 9  | BRS  | S10   | 583  | swap.AB.                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 10 | BRS  | S11   | 41   | S10 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 11 | BRS  | S12   | 6    | S11 hazard\$2           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|    | Type | Ref # | Hits | Search Text                                    | DBs                                      |
|----|------|-------|------|--|--|
| 12 | BRS  | S13   | 6    | S11 (sam\$2 adj register)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 13 | BRS  | S7    | 283  | S6 (clock adj cycle\$2)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 14 | BRS  | S14   | 4    | S6 swap.AB.                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 15 | BRS  | S15   | 137  | (first adj swap)                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 16 | BRS  | S16   | 8    | S15 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 17 | BRS  | S17   | 25   | (register adj swap) pipeline                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 18 | BRS  | S18   | 5    | (register adj swaps)<br>pipeline               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 19 | BRS  | S19   | 4    | S6 (swap adj instruction)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 20 | BRS  | S20   | 78   | (register adj swap\$2)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 21 | BRS  | S21   | 4    | (register adj swap\$2).AB.                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 22 | BRS  | S22   | 16   | S20 ((out-or-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|    | Type | Ref # | Hits | Search Text                                 | DBs                                      |
|----|------|-------|------|---|--|
| 23 | BRS  | S23   | 17   | S20 ((out-of-order) or (out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 24 | BRS  | S24   | 1903 | processor pipeline swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 25 | BRS  | S26   | 1708 | S24 register                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 26 | BRS  | S27   | 470  | S26 restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 27 | BRS  | S28   | 412  | S27 save                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 28 | BRS  | S29   | 332  | S28 delay\$4                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 29 | BRS  | S30   | 283  | S29 (clock adj cycle\$2)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 30 | BRS  | S33   | 584  | swap.AB.                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 31 | BRS  | S39   | 137  | (first adj swap)                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 32 | BRS  | S25   | 1    | "6900668".PN.                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 33 | BRS  | S32   | 1    | S31 swap.AB.                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|----|------|-------|------|----------------------------------|--|
| 34 | BRS  | S31   | 53   | S30 thread\$2                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 35 | BRS  | S34   | 41   | S33 processor pipeline           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 36 | BRS  | S35   | 6    | S34 hazard\$2                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 37 | BRS  | S36   | 6    | S34 (sam\$2 adj register)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 38 | BRS  | S38   | 4    | S29 swap.AB.                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 39 | BRS  | S40   | 8    | S39 processor pipeline           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 40 | BRS  | S41   | 25   | (register adj swap) pipeline     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 41 | BRS  | S42   | 5    | (register adj swaps)<br>pipeline | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 42 | BRS  | S43   | 4    | S29 (swap adj instruction)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 43 | BRS  | S44   | 78   | (register adj swap\$2)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 44 | BRS  | S45   | 4    | (register adj swap\$2).AB.       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|----|------|-------|------|---|--|
| 45 | BRS  | S46   | 16   | S44 ((out-or-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 46 | BRS  | S47   | 17   | S44 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 47 | BRS  | S37   | 283  | S29 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 48 | BRS  | S48   | 1209 | pipeline\$2 ((out-of-order) or (out near\$2 order)) swap                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 49 | BRS  | S49   | 4    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 50 | BRS  | S50   | 0    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near5 hazard)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 51 | BRS  | S51   | 0    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near5 conflict)                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 52 | BRS  | S52   | 109  | pipeline\$2 ((out-of-order) or (out near\$2 order)) swap hazard\$2                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 53 | BRS  | S53   | 95   | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near\$3 instruction) hazard\$2    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 54 | BRS  | S54   | 4    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 55 | BRS  | S55   | 2    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|----|------|-------|------|--|--|
| 56 | BRS  | S56   | 44   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 57 | BRS  | S57   | 297  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 58 | BRS  | S58   | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 59 | BRS  | S59   | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 60 | BRS  | S60   | 297  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 61 | BRS  | S61   | 9    | (swap near5 save) (swap<br>near5 restore)                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 62 | BRS  | S62   | 1    | (swap near5 save) (swap<br>near5 restore) RAW                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 63 | BRS  | S63   | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 64 | BRS  | S64   | 274  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 65 | BRS  | S65   | 30   | (swap adj instruction) save<br>restore                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 66 | BRS  | S66   | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|----|------|-------|------|--|--|
| 67 | BRS  | S67   | 0    | (swap adj instruction) save<br>restore hazard                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 68 | BRS  | S68   | 0    | (swap adj instruction)<br>(hazard adj prevention)                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 69 | BRS  | S69   | 12   | (swap adj instruction) (RAW<br>or WAR)                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 70 | BRS  | S109  | 4    | S98 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 71 | BRS  | S107  | 6    | S106 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 72 | BRS  | S114  | 78   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 73 | BRS  | S115  | 4    | (register adj swap\$2).AB.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 74 | BRS  | S116  | 16   | S114 ((out-or-order) or (out<br>near\$2 order).))                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 75 | BRS  | S131  | 297  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 76 | BRS  | S72   | 1708 | S70 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 77 | BRS  | S91   | 4    | (register adj swap\$2).AB.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|----|------|-------|------|--|--|
| 78 | BRS  | S92   | 16   | S90 ((out-or-order) or (out near\$2 order))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 79 | BRS  | S93   | 17   | S90 ((out-of-order) or (out near\$2 order))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 80 | BRS  | S106  | 41   | S100 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 81 | BRS  | S110  | 8    | S101 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 82 | BRS  | S108  | 6    | S106 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 83 | BRS  | S117  | 17   | S114 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 84 | BRS  | S120  | 4    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 85 | BRS  | S113  | 4    | S98 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 86 | BRS  | S111  | 25   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 87 | BRS  | S112  | 5    | (register adj swaps) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 88 | BRS  | S124  | 95   | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



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|----|------|-------|------|---|--|
| 89 | BRS  | S126  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 90 | BRS  | S127  | 44   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 91 | BRS  | S132  | 9    | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 92 | BRS  | S140  | 12   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 93 | BRS  | S123  | 109  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 94 | BRS  | S125  | 4    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 95 | BRS  | S83   | 283  | S75 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 96 | BRS  | S105  | 53   | S99 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 97 | BRS  | S88   | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 98 | BRS  | S87   | 25   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 99 | BRS  | S86   | 8    | S85 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|-----|------|-------|------|--|--|
| 100 | BRS  | S84   | 4    | S75 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 101 | BRS  | S82   | 6    | S80 (sam\$2 adj register)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102 | BRS  | S81   | 6    | S80 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103 | BRS  | S80   | 41   | S79 processor pipeline                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 104 | BRS  | S77   | 53   | S76 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 105 | BRS  | S134  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 106 | BRS  | S104  | 1    | S103 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107 | BRS  | S102  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 108 | BRS  | S78   | 1    | S77 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 109 | BRS  | S71   | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 110 | BRS  | S139  | 0    | (swap adj instruction)<br>(hazard adj prevention)      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|-----|------|-------|------|---|--|
| 111 | BRS  | S138  | 0    | (swap adj instruction) save<br>restore hazard                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112 | BRS  | S137  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113 | BRS  | S136  | 30   | (swap adj instruction) save<br>restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 114 | BRS  | S135  | 274  | (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 115 | BRS  | S133  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 116 | BRS  | S130  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 117 | BRS  | S118  | 283  | S98 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 118 | BRS  | S129  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 119 | BRS  | S128  | 297  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 120 | BRS  | S122  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 121 | BRS  | S121  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|-----|------|-------|------|---|--|
| 122 | BRS  | S119  | 1209 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 123 | BRS  | S103  | 53   | S99 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 124 | BRS  | S101  | 137  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 125 | BRS  | S100  | 584  | swap,AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 126 | BRS  | S99   | 283  | S98 (clock adj cycle\$2)                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 127 | BRS  | S98   | 332  | S97 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 128 | BRS  | S97   | 412  | S96 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 129 | BRS  | S96   | 470  | S95 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 130 | BRS  | S95   | 1708 | S94 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 131 | BRS  | S94   | 1903 | processor pipeline swap                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 132 | BRS  | S85   | 137  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

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|-----|------|-------|------|--|--|
| 133 | BRS  | S79   | 584  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 134 | BRS  | S74   | 412  | S73 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 135 | BRS  | S75   | 332  | S74 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 136 | BRS  | S76   | 283  | S75 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 137 | BRS  | S73   | 470  | S72 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 138 | BRS  | S90   | 78   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 139 | BRS  | S89   | 4    | S75 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 140 | BRS  | S70   | 1903 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 141 | BRS  | S173  | 102  | S169 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 142 | BRS  | S198  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 143 | BRS  | S197  | 406  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 144 | BRS  | S264  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 145 | BRS  | S191  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 146 | BRS  | S190  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 147 | BRS  | S188  | 1486 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 148 | BRS  | S171  | 153  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 149 | BRS  | S170  | 669  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 150 | BRS  | S169  | 345  | S168 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                            | DBs                                      |
|-----|------|-------|------|--|--|
| 151 | BRS  | S168  | 397  | S167 delay\$4                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 152 | BRS  | S167  | 491  | S166 save                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 153 | BRS  | S270  | 32   | (swap adj instruction) save<br>restore | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 154 | BRS  | S166  | 560  | S165 restore                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 155 | BRS  | S165  | 2041 | S164 register                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 156 | BRS  | S157  | 26   | (register adj swap) pipeline           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 157 | BRS  | S247  | 345  | S246 (clock adj cycle\$2)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 158 | BRS  | S156  | 9    | S155 processor pipeline                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 159 | BRS  | S159  | 4    | S146 (swap adj instruction)            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 160 | BRS  | S164  | 2291 | processor pipeline swap                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 161 | BRS  | S280  | 4    | S246 (swap adj instruction)            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 162 | BRS  | S208  | 0    | (swap adj instruction)<br>(hazard adj prevention)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 163 | BRS  | S194  | 4    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 164 | BRS  | S210  | 2291 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 165 | BRS  | S182  | 4    | S168 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 166 | BRS  | S189  | 4    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 167 | BRS  | S155  | 153  | (first adj swap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 168 | BRS  | S150  | 669  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 169 | BRS  | S146  | 397  | S145 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 170 | BRS  | S145  | 491  | S144 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 171 | BRS  | S144  | 560  | S143 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 172 | BRS  | S266  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 173 | BRS  | S143  | 2041 | S141 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 174 | BRS  | S152  | 6    | S151 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 175 | BRS  | S227  | 16   | S226 ((out-or-order) or (out<br>near\$2 order))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 176 | BRS  | S262  | 102  | S248 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 177 | BRS  | S267  | 0    | (swap adj instruction)<br>(hazard adj prevention)                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 178 | BRS  | S226  | 83   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 179 | BRS  | S225  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 180 | BRS  | S221  | 16   | S219 ((out-or-order) or (out<br>near\$2 order))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 181 | BRS  | S220  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 182 | BRS  | S163  | 17   | S160 ((out-of-order) or (out<br>near\$2 order))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 183 | BRS  | S196  | 50   | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2 RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 184 | BRS  | S148  | 102  | S147 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 185 | BRS  | S158  | 5    | (register adj swaps)<br>pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 186 | BRS  | S175  | 46   | S170 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 187 | BRS  | S161  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 188 | BRS  | S235  | 26   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 189 | BRS  | S207  | 0    | (swap adj instruction) save<br>restore hazard  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 190 | BRS  | S206  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 191 | BRS  | S205  | 32   | (swap adj instruction) save<br>restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 192 | BRS  | S241  | 13   | (swap adj instruction) (RAW<br>or WAR)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 193 | BRS  | S243  | 4    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 194 | BRS  | S204  | 318  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 195 | BRS  | S202  | 1    | (swap near5 save) (swap near5 restore) RAW   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 196 | BRS  | S199  | 0    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap.AB.) RAW                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 197 | BRS  | S276  | 406  | pipeline\$2 ((out-of-order) or (out near2 order)) swap RAW                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 198 | BRS  | S153  | 6    | S151 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 199 | BRS  | S151  | 46   | S150 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 200 | BRS  | S162  | 16   | S160 ((out-or-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 201 | BRS  | S258  | 6    | S256 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 202 | BRS  | S257  | 6    | S256 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 203 | BRS  | S275  | 0    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap.ab.) RAW                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 204 | BRS  | S195  | 2    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2 WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 205 | BRS  | S263  | 1    | S262 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 206 | BRS  | S255  | 669  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 207 | BRS  | S259  | 345  | S246 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 208 | BRS  | S251  | 26   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 209 | BRS  | S253  | 9    | S252 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 210 | BRS  | S254  | 4    | S246 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 211 | BRS  | S183  | 83   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 212 | BRS  | S154  | 4    | S146 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 213 | BRS  | S217  | 46   | S216 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 214 | BRS  | S236  | 5    | (register adj swaps)<br>pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 215 | BRS  | S239  | 50   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 216 | BRS  | S209  | 13   | (swap adj instruction) (RAW<br>or WAR)                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 217 | BRS  | S160  | 83   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 218 | BRS  | S177  | 6    | S175 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 219 | BRS  | S265  | 1    | S260 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 220 | BRS  | S233  | 4    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 221 | BRS  | S180  | 26   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 222 | BRS  | S181  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 223 | BRS  | S174  | 1    | S173 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 224 | BRS  | S172  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 225 | BRS  | S149  | 1    | S148 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 226 | BRS  | S203  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 227 | BRS  | S261  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 228 | BRS  | S215  | 4    | S214 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 229 | BRS  | S142  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 230 | BRS  | S278  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 231 | BRS  | S277  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 232 | BRS  | S279  | 1486 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 233 | BRS  | S184  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 234 | BRS  | S185  | 16   | S183 ((out-or-order) or (out<br>near\$2 order))                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 235 | BRS  | S201  | 12   | (swap near5 save) (swap<br>near5 restore)                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 236 | BRS  | S273  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 237 | BRS  | S272  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 238 | BRS  | S211  | 2041 | S210 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                     | DBs                                      |
|-----|------|-------|------|---|--|
| 239 | BRS  | S218  | 6    | S217 hazard\$2                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 240 | BRS  | S219  | 83   | (register adj swap\$2)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 241 | BRS  | S228  | 17   | S226 ((out-of-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 242 | BRS  | S230  | 9    | S229 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 243 | BRS  | S231  | 6    | S217 (sam\$2 adj register)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 244 | BRS  | S141  | 2291 | processor pipeline swap                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 245 | BRS  | S214  | 397  | S213 delay\$4                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 246 | BRS  | S216  | 669  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 247 | BRS  | S178  | 4    | S168 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 248 | BRS  | S212  | 560  | S211 restore                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 249 | BRS  | S213  | 491  | S212 save                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 250 | BRS  | S223  | 2291 | processor pipeline swap                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 251 | BRS  | S232  | 17   | S219 ((out-of-order) or (out<br>near\$2 order))     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 252 | BRS  | S256  | 46   | S255 processor pipeline                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 253 | BRS  | S224  | 2041 | S223 register                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 254 | BRS  | S229  | 153  | (first adj swap)                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 255 | BRS  | S244  | 560  | S224 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 256 | BRS  | S250  | 5    | (register adj swaps)<br>pipeline                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 257 | BRS  | S246  | 397  | S245 delay\$4                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 258 | BRS  | S248  | 345  | S214 (clock adj cycle\$2)                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 259 | BRS  | S269  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 260 | BRS  | S252  | 153  | (first adj swap)                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 261 | BRS  | S245  | 491  | S244 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 262 | BRS  | S268  | 0    | (swap adj instruction) save<br>restore hazard   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 263 | BRS  | S271  | 318  | (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 264 | BRS  | S234  | 4    | S214 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 265 | BRS  | S179  | 9    | S171 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 266 | BRS  | S238  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 267 | BRS  | S240  | 12   | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 268 | BRS  | S186  | 17   | S183 ((out-of-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 269 | BRS  | S176  | 6    | S175 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 270 | BRS  | S192  | 121  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 271 | BRS  | S193  | 107  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 272 | BRS  | S237  | 107  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 273 | BRS  | S260  | 102  | S259 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 274 | BRS  | S242  | 121  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 275 | BRS  | S249  | 102  | S248 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 276 | BRS  | S147  | 345  | S146 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 277 | BRS  | S187  | 345  | S168 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 278 | BRS  | S274  | 345  | S214 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 279 | BRS  | S200  | 406  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 280 | BRS  | S222  | 406  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 281 | BRS  | S281  | 3    | tam-kenway.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 282 | BRS  | S282  | 17   | kant-shree.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text               | DBs                                      |
|-----|------|-------|------|---------------------------|--|
| 283 | BRS  | S283  | 665  | 712/225.ccls.             | US-PGPUB;<br>USPAT                       |
| 284 | BRS  | S284  | 526  | 712/216.ccls.             | US-PGPUB;<br>USPAT                       |
| 285 | BRS  | S285  | 596  | 712/218.ccls.             | US-PGPUB;<br>USPAT                       |
| 286 | BRS  | S286  | 353  | 712/219.ccls.             | US-PGPUB;<br>USPAT                       |
| 287 | BRS  | S287  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 288 | BRS  | S288  | 1    | "6900668".PN.             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 289 | BRS  | S289  | 2142 | S287 register             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 290 | BRS  | S290  | 585  | S289 restore              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 291 | BRS  | S291  | 514  | S290 save                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 292 | BRS  | S292  | 413  | S291 delay\$4             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 293 | BRS  | S293  | 359  | S292 (clock adj cycle\$2) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 294 | BRS  | S294  | 113  | S293 thread\$2            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 295 | BRS  | S296  | 712  | swap.AB.                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                | DBs                                      |
|-----|------|-------|------|----------------------------|--|
| 296 | BRS  | S295  | 1    | S294 swap.AB.              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 297 | BRS  | S297  | 49   | S296 processor pipeline    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 298 | BRS  | S301  | 160  | (first adj swap)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 299 | BRS  | S298  | 7    | S297 hazard\$2             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 300 | BRS  | S299  | 7    | S297 (sam\$2 adj register) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                     | DBs                                      |
|-----|------|-------|------|---|--|
| 301 | BRS  | S300  | 4    | S292 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 302 | BRS  | S302  | 10   | S301 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 303 | BRS  | S303  | 28   | (register adj swap) pipeline                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 304 | BRS  | S304  | 5    | (register adj swaps)<br>pipeline                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 305 | BRS  | S306  | 87   | (register adj swap\$2)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 306 | BRS  | S305  | 4    | S292 (swap adj instruction)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 307 | BRS  | S309  | 19   | S306 ((out-of-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 308 | BRS  | S307  | 4    | (register adj swap\$2).AB.                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 309 | BRS  | S308  | 18   | S306 ((out-or-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 310 | BRS  | S310  | 2411 | processor pipeline swap                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 311 | BRS  | S311  | 2142 | S310 register                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                 | DBs                                      |
|-----|------|-------|------|-----------------------------|--|
| 312 | BRS  | S312  | 585  | S311 restore                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 313 | BRS  | S313  | 514  | S312 save                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 314 | BRS  | S314  | 413  | S313 delay\$4               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 315 | BRS  | S315  | 359  | S314 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 316 | BRS  | S316  | 712  | swap.AB.                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 317 | BRS  | S317  | 160  | (first adj swap)            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 318 | BRS  | S319  | 113  | S315 thread\$2              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 319 | BRS  | S318  | 1    | "6900668".PN.               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 320 | BRS  | S321  | 49   | S316 processor pipeline     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 321 | BRS  | S320  | 1    | S319 swap.AB.               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 322 | BRS  | S328  | 4    | S314 (swap adj instruction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 323 | BRS  | S322  | 7    | S321 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 324 | BRS  | S323  | 7    | S321 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 325 | BRS  | S324  | 4    | S314 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 326 | BRS  | S325  | 10   | S317 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 327 | BRS  | S326  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 328 | BRS  | S327  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 329 | BRS  | S337  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 330 | BRS  | S336  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 331 | BRS  | S329  | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 332 | BRS  | S333  | 359  | S314 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 333 | BRS  | S330  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 334 | BRS  | S331  | 18   | S329 ((out-or-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 335 | BRS  | S332  | 19   | S329 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 336 | BRS  | S338  | 128  | pipeline\$2 ((out-of-order) or (out near\$2 order)) swap hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 337 | BRS  | S334  | 1566 | pipeline\$2 ((out-of-order) or (out near\$2 order)) swap                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 338 | BRS  | S335  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 339 | BRS  | S339  | 111  | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 340 | BRS  | S343  | 432  | pipeline\$2 ((out-of-order) or (out near2 order)) swap RAW                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 341 | BRS  | S340  | 5    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 342 | BRS  | S341  | 2    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2 WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 343 | BRS  | S342  | 53   | pipeline\$2 ((out-of-order) or (out near2 order)) swap hazard\$2 RAW                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 344 | BRS  | S344  | 0    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap.ab.) RAW                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 345 | BRS  | S345  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 346 | BRS  | S346  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 347 | BRS  | S347  | 14   | (swap near5 save) (swap<br>near5 restore)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 348 | BRS  | S348  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 349 | BRS  | S349  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 350 | BRS  | S350  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 351 | BRS  | S351  | 36   | (swap adj instruction) save<br>restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 352 | BRS  | S352  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 353 | BRS  | S353  | 0    | (swap adj instruction) save<br>restore hazard                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 354 | BRS  | S354  | 0    | (swap adj instruction)<br>(hazard adj prevention)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 355 | BRS  | S356  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                         | DBs                                      |
|-----|------|-------|------|-------------------------------------|--|
| 356 | BRS  | S355  | 13   | (swap adj instruction) (RAW or WAR) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 357 | BRS  | S357  | 2142 | S356 register                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 358 | BRS  | S358  | 585  | S357 restore                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 359 | BRS  | S359  | 514  | S358 save                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 360 | BRS  | S360  | 413  | S359 delay\$4                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 361 | BRS  | S361  | 4    | S360 swap.AB.                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 362 | BRS  | S362  | 712  | swap.AB.                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 363 | BRS  | S363  | 49   | S362 processor pipeline             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 364 | BRS  | S364  | 7    | S363 hazard\$2                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 365 | BRS  | S365  | 87   | (register adj swap\$2)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 366 | BRS  | S366  | 4    | (register adj swap\$2).AB.          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 367 | BRS  | S367  | 18   | S365 ((out-of-order) or (out near\$2 order))                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 368 | BRS  | S368  | 432  | pipeline\$2 (('out-of-order) or (out near2 order)) swap RAW             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 369 | BRS  | S369  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 370 | BRS  | S379  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 371 | BRS  | S370  | 2142 | S369 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 372 | BRS  | S371  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 373 | BRS  | S372  | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 374 | BRS  | S373  | 18   | S372 ((out-of-order) or (out near\$2 order))                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 375 | BRS  | S374  | 19   | S372 ((out-of-order) or (out near\$2 order))                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 376 | BRS  | S375  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 377 | BRS  | S376  | 10   | S375 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 378 | BRS  | S377  | 7    | S363 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 379 | BRS  | S378  | 19   | S365 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 380 | BRS  | S380  | 4    | S360 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 381 | BRS  | S383  | 111  | pipeline\$2 ((out-of-order) or (out near\$2 order)) (swap near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 382 | BRS  | S381  | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 383 | BRS  | S382  | 5    | (register adj swaps) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 384 | BRS  | S386  | 14   | (swap near5 save) (swap near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 385 | BRS  | S385  | 53   | pipeline\$2 ((out-of-order) or (out near2 order)) swap hazard\$2 RAW                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 386 | BRS  | S384  | 2    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2 WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 387 | BRS  | S388  | 128  | pipeline\$2 ((out-of-order) or (out near\$2 order)) swap hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 388 | BRS  | S387  | 13   | (swap adj instruction) (RAW or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 389 | BRS  | S389  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 390 | BRS  | S390  | 585  | S370 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 391 | BRS  | S391  | 514  | S390 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 392 | BRS  | S392  | 413  | S391 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 393 | BRS  | S405  | 359  | S392 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 394 | BRS  | S394  | 359  | S360 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 395 | BRS  | S393  | 359  | S392 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 396 | BRS  | S402  | 49   | S401 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 397 | BRS  | S395  | 113  | S394 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 398 | BRS  | S401  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 399 | BRS  | S396  | 5    | (register adj swaps)<br>pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 400 | BRS  | S398  | 160  | (first adj swap)                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 401 | BRS  | S397  | 28   | (register adj swap) pipeline                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 402 | BRS  | S400  | 4    | S392 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 403 | BRS  | S399  | 10   | S398 processor pipeline                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 404 | BRS  | S404  | 7    | S402 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 405 | BRS  | S403  | 7    | S402 (sam\$2 adj register)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 406 | BRS  | S406  | 113  | S405 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 407 | BRS  | S427  | 2411 | processor pipeline swap                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 408 | BRS  | S408  | 113  | S394 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 409 | BRS  | S407  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 410 | BRS  | S426  | 4    | S392 (swap adj instruction)                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 411 | BRS  | S409  | 1    | S408 swap.AB.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 412 | BRS  | S420  | 359  | S360 (clock adj cycle\$2)                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 413 | BRS  | S410  | 1    | "6900668".PN.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 414 | BRS  | S411  | 1    | S406 swap.AB.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 415 | BRS  | S418  | 1    | (swap near5 save) (swap<br>near5 restore) RAW       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 416 | BRS  | S412  | 1    | "6900668".PN.                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 417 | BRS  | S413  | 0    | (swap adj instruction)<br>(hazard adj prevention)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 418 | BRS  | S417  | 339  | (swap adj instruction)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 419 | BRS  | S414  | 0    | (swap adj instruction) save<br>restore hazard       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 420 | BRS  | S416  | 36   | (swap adj instruction) save<br>restore              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 421 | BRS  | S415  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 422 | BRS  | S419  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 423 | BRS  | S425  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 424 | BRS  | S421  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 425 | BRS  | S422  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 426 | BRS  | S423  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 427 | BRS  | S424  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 428 | BRS  | S428  | 2142 | S427 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 429 | BRS  | S429  | 585  | S428 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 430 | BRS  | S430  | 514  | S429 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 431 | BRS  | S431  | 413  | S430 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 432 | BRS  | S432  | 359  | S431 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 433 | BRS  | S433  | 113  | S432 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 434 | BRS  | S434  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(swap.ab.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 435 | BRS  | S435  | 432  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 436 | BRS  | S437  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 437 | BRS  | S436  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 438 | BRS  | S438  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 439 | BRS  | S439  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 440 | BRS  | S440  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 441 | BRS  | S441  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 442 | BRS  | S442  | 36   | (swap adj instruction) save<br>restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 443 | BRS  | S443  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text               | DBs                                      |
|-----|------|-------|------|---------------------------|--|
| 444 | BRS  | S444  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 445 | BRS  | S445  | 2142 | S444 register             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 446 | BRS  | S446  | 585  | S445 restore              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 447 | BRS  | S447  | 514  | S446 save                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 448 | BRS  | S448  | 413  | S447 delay\$4             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 449 | BRS  | S449  | 359  | S448 (clock adj cycle\$2) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 450 | BRS  | S450  | 160  | (first adj swap)          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 451 | BRS  | S451  | 10   | S450 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 452 | BRS  | S452  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 453 | BRS  | S453  | 2142 | S452 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 454 | BRS  | S454  | 585  | S453 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 455 | BRS  | S455  | 514  | S454 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 456 | BRS  | S456  | 413  | S455 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 457 | BRS  | S457  | 4    | S456 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 458 | BRS  | S458  | 4    | S448 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 459 | BRS  | S459  | 0    | (swap adj instruction)<br>(hazard adj prevention)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 460 | BRS  | S460  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 461 | BRS  | S462  | 4    | S431 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 462 | BRS  | S461  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 463 | BRS  | S465  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 464 | BRS  | S464  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 465 | BRS  | S463  | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap). | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 466 | BRS  | S466  | 49   | S464 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 467 | BRS  | S467  | 7    | S466 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 468 | BRS  | S468  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 469 | BRS  | S469  | 18   | S468 ((out-or-order) or (out<br>near\$2 order))                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 470 | BRS  | S470  | 2142 | S461 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 471 | BRS  | S471  | 585  | S470 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 472 | BRS  | S472  | 514  | S471 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 473 | BRS  | S473  | 413  | S472 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 474 | BRS  | S474  | 359  | S473 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 475 | BRS  | S475  | 113  | S474 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 476 | BRS  | S476  | 0    | (swap adj instruction)<br>(hazard adj prevention)                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 477 | BRS  | S477  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 478 | BRS  | S478  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 479 | BRS  | S479  | 18   | S478 ((out-or-order) or (out<br>near\$2 order))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 480 | BRS  | S480  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 481 | BRS  | S481  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 482 | BRS  | S482  | 19   | S481 ((out-of-order) or (out<br>near\$2 order))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 483 | BRS  | S483  | 53   | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2 RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 484 | BRS  | S484  | 359  | S456 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 485 | BRS  | S485  | 113  | S484 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 486 | BRS  | S486  | 5    | (register adj swaps)<br>pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 487 | BRS  | S487  | 49   | S441 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 488 | BRS  | S488  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 489 | BRS  | S489  | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 490 | BRS  | S490  | 0    | (swap adj instruction) save<br>restore hazard  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 491 | BRS  | S491  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 492 | BRS  | S492  | 36   | (swap adj instruction) save<br>restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 493 | BRS  | S493  | 13   | (swap adj instruction) (RAW<br>or WAR)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 494 | BRS  | S494  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 495 | BRS  | S495  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 496 | BRS  | S496  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 497 | BRS  | S497  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 498 | BRS  | S498  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 499 | BRS  | S499  | 7    | S466 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 500 | BRS  | S501  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 501 | BRS  | S500  | 18   | S481 ((out-or-order) or (out<br>near\$2 order))                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 502 | BRS  | S502  | 49   | S501 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 503 | BRS  | S503  | 7    | S502 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 504 | BRS  | S504  | 7    | S502 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 505 | BRS  | S505  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 506 | BRS  | S506  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 507 | BRS  | S507  | 1    | S475 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 508 | BRS  | S512  | 4    | S448 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 509 | BRS  | S508  | 359  | S448 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 510 | BRS  | S511  | 10   | S510 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 511 | BRS  | S509  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 512 | BRS  | S510  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 513 | BRS  | S513  | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 514 | BRS  | S514  | 4    | S456 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 515 | BRS  | S515  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 516 | BRS  | S516  | 49   | S515 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 517 | BRS  | S519  | 13   | (swap adj instruction) (RAW or WAR)                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 518 | BRS  | S518  | 53   | pipeline\$2 ((out-of-order) or (out near2 order)) swap hazard\$2 RAW    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 519 | BRS  | S517  | 5    | (register adj swaps) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 520 | BRS  | S520  | 7    | S487 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 521 | BRS  | S521  | 113  | S508 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 522 | BRS  | S523  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 523 | BRS  | S522  | 1    | S521 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 524 | BRS  | S524  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 525 | BRS  | S526  | 1    | S433 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 526 | BRS  | S525  | 5    | (register adj swaps) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 527 | BRS  | S527  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 528 | BRS  | S528  | 1    | S485 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 529 | BRS  | S529  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 530 | BRS  | S530  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 531 | BRS  | S531  | 4    | S473 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 532 | BRS  | S532  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 533 | BRS  | S533  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 534 | BRS  | S535  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 535 | BRS  | S534  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 536 | BRS  | S536  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 537 | BRS  | S537  | 18   | S513 ((out-or-order) or (out<br>near\$2 order))                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 538 | BRS  | S538  | 14   | (swap near5 save) (swap<br>near5 restore)                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 539 | BRS  | S539  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 540 | BRS  | S540  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 541 | BRS  | S541  | 7    | S516 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 542 | BRS  | S542  | 19   | S468 ((out-of-order) or (out<br>near\$2 order))                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 543 | BRS  | S543  | 160  | (first adj swap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 544 | BRS  | S544  | 10   | S543 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 545 | BRS  | S545  | 7    | S516 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 546 | BRS  | S546  | 4    | S431 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 547 | BRS  | S547  | 19   | S478 ((out-of-order) or (out<br>near\$2 order))                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 548 | BRS  | S548  | 5    | (register adj swaps)<br>pipeline                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 549 | BRS  | S549  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 550 | BRS  | S550  | 0    | (swap adj instruction) save<br>restore hazard   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 551 | BRS  | S553  | 10   | S440 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 552 | BRS  | S551  | 339  | (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 553 | BRS  | S552  | 4    | S473 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 554 | BRS  | S554  | 2    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 555 | BRS  | S555  | 14   | (swap near\$5 save) (swap<br>near\$5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 556 | BRS  | S556  | 19   | S513 ((out-of-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 557 | BRS  | S557  | 7    | S487 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 558 | BRS  | S558  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 559 | BRS  | S559  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 560 | BRS  | S561  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 561 | BRS  | S560  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 562 | BRS  | S562  | 113  | S474 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 563 | BRS  | S563  | 359  | S431 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 564 | BRS  | S564  | 359  | S473 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 565 | BRS  | S565  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 566 | BRS  | S566  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW.                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 567 | BRS  | S568  | 18   | kant-shree.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 568 | BRS  | S567  | 4    | tam-kenway.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 569 | BRS  | S732  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 570 | BRS  | S799  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 571 | BRS  | S647  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 572 | BRS  | S837  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 573 | BRS  | S880  | 1    | S878 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 574 | BRS  | S997  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 575 | BRS  | S739  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 576 | BRS  | S740  | 36   | (swap adj instruction) save<br>restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 577 | BRS  | S742  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 578 | BRS  | S998  | 1    | S990 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 579 | BRS  | S626  | 4    | S612 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 580 | BRS  | S759  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 581 | BRS  | S762  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 582 | BRS  | S768  | 2142 | S759 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 583 | BRS  | S726  | 2142 | S725 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 584 | BRS  | S627  | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 585 | BRS  | S624  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 586 | BRS  | S625  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 587 | BRS  | S808  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 588 | BRS  | S629  | 18   | S627 ((out-or-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 589 | BRS  | S628  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 590 | BRS  | S630  | 19   | S627 ((out-of-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 591 | BRS  | S633  | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 592 | BRS  | S638  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 593 | BRS  | S639  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 594 | BRS  | S640  | 53   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 595 | BRS  | S645  | 14   | (swap near5 save) (swap<br>near5 restore)                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 596 | BRS  | S723  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 597 | BRS  | S721  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 598 | BRS  | S1032 | 413  | S1031 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 599 | BRS  | S653  | 13   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 600 | BRS  | S659  | 4    | S658 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 601 | BRS  | S661  | 49   | S660 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 602 | BRS  | S663  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 603 | BRS  | S662  | 7    | S661 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 604 | BRS  | S664  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 605 | BRS  | S665  | 18   | S663 ((out-or-order) or (out<br>near\$2 order))                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 606 | BRS  | S669  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 607 | BRS  | S670  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 608 | BRS  | S793  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 609 | BRS  | S794  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 610 | BRS  | S795  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 611 | BRS  | S671  | 18   | S670 ((out-or-order) or (out<br>near\$2 order))                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 612 | BRS  | S672  | 19   | S670 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 613 | BRS  | S674  | 10   | S673 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 614 | BRS  | S675  | 7    | S661 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 615 | BRS  | S676  | 19   | S663 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 616 | BRS  | S677  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 617 | BRS  | S791  | 13   | (swap adj instruction) (RAW or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 618 | BRS  | S792  | 5    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 619 | BRS  | S1012 | 2142 | S991 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 620 | BRS  | S678  | 4    | S658. (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 621 | BRS  | S679  | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 622 | BRS  | S680  | 5    | (register adj swaps) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 623 | BRS  | S682  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 624 | BRS  | S683  | 53   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 625 | BRS  | S684  | 14   | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 626 | BRS  | S685  | 13   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 627 | BRS  | S687  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 628 | BRS  | S694  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 629 | BRS  | S695  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 630 | BRS  | S697  | 10   | S696 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 631 | BRS  | S698  | 4    | S690 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 632 | BRS  | S700  | 49   | S699 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 633 | BRS  | S702  | 7    | S700 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 634 | BRS  | S701  | 7    | S700 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 635 | BRS  | S724  | 4    | S690 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 636 | BRS  | S741  | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 637 | BRS  | S756  | 4    | S746 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 638 | BRS  | S749  | 10   | S748 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 639 | BRS  | S755  | 4    | S754 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 640 | BRS  | S758  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 641 | BRS  | S760  | 4    | S729 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 642 | BRS  | S761  | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 643 | BRS  | S764  | 49   | S762 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 644 | BRS  | S765  | 7    | S764 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 645 | BRS  | S766  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 646 | BRS  | S767  | 18   | S766 ((out-or-order) or (out near\$2 order))                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 647 | BRS  | S775  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 648 | BRS  | S776  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 649 | BRS  | S777  | 18   | S776 ((out-or-order) or (out near\$2 order))                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 650 | BRS  | S778  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 651 | BRS  | S779  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 652 | BRS  | S780  | 19   | S779 ((out-of-order) or (out near\$2 order))                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 653 | BRS  | S781  | 53   | pipeline\$2 ((out-of-order) or (out near2 order)) swap hazard\$2 RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 654 | BRS  | S784  | 5    | (register adj swaps)<br>pipeline                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 655 | BRS  | S785  | 49   | S739 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 656 | BRS  | S786  | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 657 | BRS  | S787  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 658 | BRS  | S887  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 659 | BRS  | S888  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 660 | BRS  | S797  | 7    | S764 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 661 | BRS  | S798  | 18   | S779 ((out-or-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 662 | BRS  | S800  | 49   | S799 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 663 | BRS  | S801  | 7    | S800 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 664 | BRS  | S802  | 7    | S800 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 665 | BRS  | S804  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 666 | BRS  | S807  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 667 | BRS  | S809  | 10   | S808 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 668 | BRS  | S810  | 4    | S746 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 669 | BRS  | S811  | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 670 | BRS  | S812  | 4    | S754 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 671 | BRS  | S814  | 49   | S813 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 672 | BRS  | S817  | 13   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 673 | BRS  | S815  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 674 | BRS  | S816  | 53   | pipeline\$2 ((out-of-order)<br>or (out near2 order).) swap<br>hazard\$2 RAW   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 675 | BRS  | S818  | 7    | S785 (sam\$2 adj register)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 676 | BRS  | S821  | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 677 | BRS  | S822  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                     | DBs                                      |
|-----|------|-------|------|---|--|
| 678 | BRS  | S829  | 4    | S771 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 679 | BRS  | S823  | 5    | (register adj swaps)<br>pipeline                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 680 | BRS  | S834  | 4    | (register adj swap\$2).AB.                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 681 | BRS  | S835  | 18   | S811 ((out-or-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 682 | BRS  | S836  | 14   | (swap near5 save) (swap<br>near5 restore)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 683 | BRS  | S839  | 7    | S814 hazard\$2                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 684 | BRS  | S840  | 19   | S766 ((out-of-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 685 | BRS  | S842  | 10   | S841 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 686 | BRS  | S843  | 7    | S814 (sam\$2 adj register)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 687 | BRS  | S844  | 4    | S729 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 688 | BRS  | S845  | 19   | S776 ((out-of-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 689 | BRS  | S846  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 690 | BRS  | S850  | 4    | S771 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 691 | BRS  | S851  | 10   | S738 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 692 | BRS  | S853  | 14   | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 693 | BRS  | S852  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 694 | BRS  | S854  | 19   | S811 ((out-of-order) or (out<br>near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 695 | BRS  | S855  | 7    | S785 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 696 | BRS  | S865  | 4    | tam-kenway.in..   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 697 | BRS  | S866  | 18   | kant-shree.in.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 698 | BRS  | S881  | 49   | S879 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 699 | BRS  | S883  | 7    | S881 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                  | DBs                                      |
|-----|------|-------|------|--|--|
| 700 | BRS  | S884  | 7    | S881 (sam\$2 adj register)                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 701 | BRS  | S885  | 4    | S876 swap.AB.                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 702 | BRS  | S886  | 10   | S882 processor pipeline                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 703 | BRS  | S889  | 87   | (register adj swap\$2)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 704 | BRS  | S890  | 4    | S876 (swap adj instruction)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 705 | BRS  | S891  | 19   | S889 ((out-of-order) or (out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 706 | BRS  | S838  | 1    | (swap near5 save) (swap near5 restore) RAW   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 707 | BRS  | S892  | 4    | (register adj swap\$2).AB.                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 708 | BRS  | S893  | 18   | S889 ((out-or-order) or (out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 709 | BRS  | S874  | 585  | S873 restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 710 | BRS  | S904  | 49   | S900 processor pipeline                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                     | DBs                                      |
|-----|------|-------|------|---|--|
| 711 | BRS  | S906  | 4    | S898 (swap adj instruction)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 712 | BRS  | S907  | 7    | S904 hazard\$2                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 713 | BRS  | S879  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 714 | BRS  | S908  | 7    | S904 (sam\$2 adj register)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 715 | BRS  | S909  | 4    | S898 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 716 | BRS  | S910  | 10   | S901 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 717 | BRS  | S917  | 4    | (register adj swap\$2).AB.                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 718 | BRS  | S911  | 28   | (register adj swap) pipeline                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 719 | BRS  | S912  | 5    | (register adj swaps)<br>pipeline                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 720 | BRS  | S915  | 87   | (register adj swap\$2)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 721 | BRS  | S918  | 18   | S915 ((out-or-order) or (out<br>near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 722 | BRS  | S919  | 19   | S915 ((out-of-order) or (out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 723 | BRS  | S922  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order)) (register adj swap)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 724 | BRS  | S925  | 5    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 725 | BRS  | S926  | 2    | pipeline\$2 ((out-of-order) or (out near2 order)) (swap near3 instruction) hazard\$2 WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 726 | BRS  | S927  | 53   | pipeline\$2 ((out-of-order) or (out near2 order)) swap hazard\$2 RAW                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 727 | BRS  | S931  | 14   | (swap near5 save) (swap near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 728 | BRS  | S940  | 13   | (swap adj instruction) (RAW or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 729 | BRS  | S945  | 4    | S944 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 730 | BRS  | S947  | 49   | S946 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 731 | BRS  | S949  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 732 | BRS  | S948  | 7    | S947 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 733 | BRS  | S950  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 734 | BRS  | S951  | 18   | S949 ((out-or-order) or (out near\$2 order))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 735 | BRS  | S954  | 6    | pipeline\$2 ((out-of-order) or (out near\$2 order))<br>(register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 736 | BRS  | S956  | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 737 | BRS  | S957  | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 738 | BRS  | S958  | 18   | S957 ((out-or-order) or (out near\$2 order))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 739 | BRS  | S959  | 19   | S957 ((out-of-order) or (out near\$2 order))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 740 | BRS  | S961  | 10   | S960 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 741 | BRS  | S962  | 7    | S947 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 742 | BRS  | S963  | 19   | S949 ((out-of-order) or (out near\$2 order))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 743 | BRS  | S964  | 4    | S944 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 744 | BRS  | S966  | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 745 | BRS  | S970  | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 746 | BRS  | S967  | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 747 | BRS  | S968  | 14   | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 748 | BRS  | S969  | 53   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 749 | BRS  | S972  | 13   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 750 | BRS  | S973  | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                      | DBs                                      |
|-----|------|-------|------|----------------------------------|--|
| 751 | BRS  | S981  | 49   | S980 processor pipeline          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 752 | BRS  | S983  | 5    | (register adj swaps)<br>pipeline | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 753 | BRS  | S985  | 28   | (register adj swap) pipeline     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 754 | BRS  | S986  | 4    | S976 swap.AB.                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 755 | BRS  | S987  | 10   | S984 processor pipeline          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 756 | BRS  | S989  | 7    | S981 (sam\$2 adj register)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 757 | BRS  | S988  | 7    | S981 hazard\$2                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 758 | BRS  | S994  | 4    | S976 (swap adj instruction)      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 759 | BRS  | S1027 | 28   | (register adj swap) pipeline     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 760 | BRS  | S1042 | 4    | S1032 (swap adj instruction)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 761 | BRS  | S1035 | 10   | S1034 processor pipeline         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 762 | BRS  | S1041 | 4    | S1040 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 763 | BRS  | S796  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 764 | BRS  | S1044 | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 765 | BRS  | S1045 | 4    | S1015 (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 766 | BRS  | S1049 | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 767 | BRS  | S1050 | 49   | S1048 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 768 | BRS  | S1051 | 7    | S1050 hazard\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 769 | BRS  | S1052 | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 770 | BRS  | S1053 | 18   | S1052 ((out-or-order) or<br>(out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 771 | BRS  | S1061 | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 772 | BRS  | S1062 | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 773 | BRS  | S1063 | 18   | S1062 ((out-or-order) or<br>(out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 774 | BRS  | S1064 | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 775 | BRS  | S1065 | 87   | (register adj swap\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 776 | BRS  | S1066 | 19   | S1065 ((out-of-order) or<br>(out near\$2 order))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 777 | BRS  | S1067 | 53   | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>hazard\$2 RAW                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 778 | BRS  | S1070 | 5    | (register adj swaps)<br>pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 779 | BRS  | S1071 | 49   | S1025 processor pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 780 | BRS  | S1072 | 4    | (register adj swap\$2).AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 781 | BRS  | S1073 | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 782 | BRS  | S1077 | 13   | (swap adj instruction) (RAW<br>or WAR)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 783 | BRS  | S1078 | 5    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 784 | BRS  | S1083 | 7    | S1050 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 785 | BRS  | S1085 | 18   | S1065 ((out-or-order) or<br>(out near\$2 order))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 786 | BRS  | S1086 | 49   | S1084 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 787 | BRS  | S1087 | 7    | S1086 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 788 | BRS  | S1088 | 7    | S1086 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 789 | BRS  | S1090 | 2    | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 790 | BRS  | S1092 | 4    | S1032 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 791 | BRS  | S1095 | 10   | S1094 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 792 | BRS  | S788  | 0    | (swap adj instruction) save<br>restore hazard   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 793 | BRS  | S1098 | 4    | S1040 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 794 | BRS  | S1096 | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 795 | BRS  | S1097 | 87   | (register adj swap\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 796 | BRS  | S1100 | 49   | S1099 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 797 | BRS  | S1103 | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 798 | BRS  | S1101 | 13   | (swap adj instruction) (RAW<br>or WAR)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 799 | BRS  | S1102 | 53   | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2 RAW  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 800 | BRS  | S1104 | 7    | S1071 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 801 | BRS  | S1106 | 6    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(register adj swap) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 802 | BRS  | S1108 | 28   | (register adj swap) pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 803 | BRS  | S1110 | 5    | (register adj swaps)<br>pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 804 | BRS  | S1115 | 4    | S1057 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 805 | BRS  | S1120 | 4    | (register adj swap\$2).AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                      | DBs                                      |
|-----|------|-------|------|--|--|
| 806 | BRS  | S1121 | 18   | S1097 ((out-or-order) or<br>(out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 807 | BRS  | S1122 | 14   | (swap near5 save) (swap<br>near5 restore)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 808 | BRS  | S1125 | 7    | S1100 hazard\$2                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 809 | BRS  | S1126 | 19   | S1052 ((out-of-order) or<br>(out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 810 | BRS  | S1128 | 10   | S1127 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 811 | BRS  | S1129 | 7    | S1100 (sam\$2 adj register)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 812 | BRS  | S1130 | 4    | S1015 swap.AB.                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 813 | BRS  | S1131 | 19   | S1062 ((out-of-order) or<br>(out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 814 | BRS  | S1132 | 5    | (register adj swaps)<br>pipeline                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 815 | BRS  | S946  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 816 | BRS  | S1135 | 10   | S1024 processor pipeline                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref #     | Hits | Search Text   | DBs                                      |
|-----|------|-----------|------|---|--|
| 817 | BRS  | S11374    |      | S1057 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 818 | BRS  | S11382    |      | pipeline\$2 ((out-of-order)<br>or (out near2 order)) (swap<br>near3 instruction) hazard\$2<br>WAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 819 | BRS  | S113914   |      | (swap near5 save) (swap<br>near5 restore)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 820 | BRS  | S114019   |      | S1097 ((out-of-order) or<br>(out near\$2 order))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 821 | BRS  | S11417    |      | S1071 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 822 | BRS  | S115118   |      | kant-shree.in.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 823 | BRS  | S11524    |      | tam-kenway.in.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 824 | BRS  | S592 113  |      | S591 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 825 | BRS  | S617 113  |      | S613 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 826 | BRS  | S10110    |      | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 827 | BRS  | S955 2142 |      | S953 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs  |
|-----|------|-------|------|--|--|
| 828 | BRS  | S960  | 160  | (first adj swap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 829 | BRS  | S974  | 585  | S955 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 830 | BRS  | S975  | 514  | S974 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 831 | BRS  | S569  | 31   | consecutive near2 swap\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 832 | BRS  | S769  | 585  | S768 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 833 | BRS  | S770  | 514  | S769 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 834 | BRS  | S1013 | 585  | S1012 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 835 | BRS  | S1014 | 514  | S1013 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 836 | BRS  | S636  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 837 | BRS  | S875  | 514  | S874 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 838 | BRS  | S876  | 413  | S875 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 839 | BRS  | S637  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 840 | BRS  | S681  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 841 | BRS  | S686  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 842 | BRS  | S693  | 113  | S692 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 843 | BRS  | S704  | 113  | S703 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 844 | BRS  | S731  | 113  | S730 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 845 | BRS  | S783  | 113  | S782 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 846 | BRS  | S819  | 113  | S806 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 847 | BRS  | S856  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 848 | BRS  | S857  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 849 | BRS  | S858  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 850 | BRS  | S859  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 851 | BRS  | S860  | 113  | S772 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 852 | BRS  | S878  | 113  | S877 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 853 | BRS  | S1059 | 113  | S1058 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 854 | BRS  | S902  | 113  | S899 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 855 | BRS  | S920  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 856 | BRS  | S923  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 857 | BRS  | S965  | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 858 | BRS  | S971  | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 859 | BRS  | S803  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(swap.ab.) RAW                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 860 | BRS  | S980  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 861 | BRS  | S982  | 113  | S978 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 862 | BRS  | S990  | 113  | S977 thread\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 863 | BRS  | S1017 | 113  | S1016 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 864 | BRS  | S1069 | 113  | S1068 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 865 | BRS  | S1105 | 113  | S1093 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 866 | BRS  | S1142 | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 867 | BRS  | S1143 | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 868 | BRS  | S1144 | 128  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>hazard\$2                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 869 | BRS  | S1145 | 111  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near\$3 instruction) hazard\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 870 | BRS  | S1146 | 113  | S1058 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 871 | BRS  | S591  | 359  | S590 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 872 | BRS  | S1028 | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 873 | BRS  | S1029 | 2142 | S1028 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 874 | BRS  | S999  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 875 | BRS  | S631  | 359  | S612 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 876 | BRS  | S1018 | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 877 | BRS  | S691  | 359  | S690 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 878 | BRS  | S718  | 359  | S658 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 879 | BRS  | S747  | 359  | S746 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 880 | BRS  | S782  | 359  | S754 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 881 | BRS  | S861  | 359  | S729 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 882 | BRS  | S862  | 359  | S771 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 883 | BRS  | S877  | 359  | S876 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 884 | BRS  | S916  | 359  | S898 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 885 | BRS  | S979  | 359  | S976 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 886 | BRS  | S996  | 359  | S944 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 887 | BRS  | S921  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 888 | BRS  | S928  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 889 | BRS  | S1033 | 359  | S1032 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 890 | BRS  | S1068 | 359  | S1040 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 891 | BRS  | S897  | 514  | S896 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 892 | BRS  | S898  | 413  | S897 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 893 | BRS  | S1147 | 359  | S1015 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 894 | BRS  | S1148 | 359  | S1057 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 895 | BRS  | S757  | 0    | (swap adj instruction)<br>(hazard adj prevention)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 896 | BRS  | S644  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 897 | BRS  | S789  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 898 | BRS  | S790  | 36   | (swap adj instruction) save<br>restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 899 | BRS  | S900  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 900 | BRS  | S717  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 900 | BRS  | S717  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 901 | BRS  | S725  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 902 | BRS  | S1094 | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 903 | BRS  | S735  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 904 | BRS  | S1081 | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 905 | BRS  | S666  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 906 | BRS  | S863  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 907 | BRS  | S864  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 908 | BRS  | S930  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 909 | BRS  | S952  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 910 | BRS  | S1149 | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text   | DBs                                      |
|-----|------|-------|------|---|--|
| 911 | BRS  | S1150 | 432  | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap<br>RAW              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 912 | BRS  | S1020 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 913 | BRS  | S736  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 914 | BRS  | S1056 | 514  | S1055 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 915 | BRS  | S1057 | 413  | S1056 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 916 | BRS  | S1024 | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 917 | BRS  | S1089 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(swap.ab.) RAW        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 918 | BRS  | S771  | 413  | S770 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 919 | BRS  | S1004 | 36   | (swap adj instruction) save<br>restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 920 | BRS  | S1005 | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 921 | BRS  | S1006 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order))<br>(swap.AB.) RAW        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 922 | BRS  | S977  | 359  | S976 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 923 | BRS  | S1009 | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 924 | BRS  | S590  | 413  | S589 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 925 | BRS  | S833  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 926 | BRS  | S699  | 712  | swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 927 | BRS  | S668  | 2142 | S667 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 928 | BRS  | S806  | 359  | S746 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 929 | BRS  | S651  | 0    | (swap adj instruction) save<br>restore hazard                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 930 | BRS  | S657  | 514  | S656 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 931 | BRS  | S935  | 36   | (swap adj instruction) save<br>restore                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 932 | BRS  | S936  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text                                       | DBs                                      |
|-----|------|-------|------|---|--|
| 933 | BRS  | S937  | 0    | (swap adj instruction) save<br>restore hazard     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 934 | BRS  | S978  | 359  | S944 (clock adj cycle\$2)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 935 | BRS  | S613  | 359  | S612 (clock adj cycle\$2)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 936 | BRS  | S882  | 160  | (first adj swap)                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 937 | BRS  | S894  | 2411 | processor pipeline swap                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 938 | BRS  | S895  | 2142 | S894 register                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 939 | BRS  | S896  | 585  | S895 restore                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 940 | BRS  | S938  | 0    | (swap adj instruction)<br>(hazard adj prevention) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 941 | BRS  | S939  | 2411 | processor pipeline swap                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 942 | BRS  | S941  | 2142 | S939 register                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 943 | BRS  | S942  | 585  | S941 restore                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|     | Type | Ref # | Hits | Search Text                                   | DBs                                      |
|-----|------|-------|------|---|--|
| 944 | BRS  | S690  | 413  | S689 delay\$4                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 945 | BRS  | S1046 | 2411 | processor pipeline swap                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 946 | BRS  | S1048 | 712  | swap.AB.                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 947 | BRS  | S1054 | 2142 | S1046 register                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 948 | BRS  | S1055 | 585  | S1054 restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 949 | BRS  | S593  | 1    | S592 swap.AB.                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 950 | BRS  | S1025 | 712  | swap.AB.                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 951 | BRS  | S1026 | 36   | (swap adj instruction) save<br>restore        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 952 | BRS  | S646  | 1    | (swap near5 save) (swap<br>near5 restore) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 953 | BRS  | S899  | 359  | S898 (clock adj cycle\$2)                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 954 | BRS  | S848  | 0    | (swap adj instruction) save<br>restore hazard | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 955 | BRS  | S849  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 956 | BRS  | S867  | 665  | 712/225.ccls.  | US-PGPUB;<br>USPAT                       |
| 957 | BRS  | S737  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 958 | BRS  | S868  | 526  | 712/216.ccls.  | US-PGPUB;<br>USPAT                       |
| 959 | BRS  | S869  | 596  | 712/218.ccls.  | US-PGPUB;<br>USPAT                       |
| 960 | BRS  | S870  | 353  | 712/219.ccls.  | US-PGPUB;<br>USPAT                       |
| 961 | BRS  | S871  | 2411 | processor pipeline swap  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 962 | BRS  | S873  | 2142 | S871 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 963 | BRS  | S1058 | 359  | S1057 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 964 | BRS  | S710  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 965 | BRS  | S730  | 359  | S729 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 966 | BRS  | S976  | 413  | S975 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 967 | BRS  | S1008 | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs                                      |
|-----|------|-------|------|--|--|
| 968 | BRS  | S1037 | 2142 | S1036 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 969 | BRS  | S1038 | 585  | S1037 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 970 | BRS  | S1039 | 514  | S1038 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 971 | BRS  | S1043 | 0    | (swap adj instruction)<br>(hazard adj prevention)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 972 | BRS  | S649  | 36   | (swap adj instruction) save<br>restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 973 | BRS  | S688  | 585  | S668 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 974 | BRS  | S1007 | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap            | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 975 | BRS  | S728  | 514  | S727 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 976 | BRS  | S729  | 413  | S728 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 977 | BRS  | S643  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 978 | BRS  | S1040 | 413  | S1039 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs  |
|-----|------|-------|------|--|--|
| 979 | BRS  | S932  | 1    | (swap near5 save) (swap near5 restore) RAW                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 980 | BRS  | S934  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 981 | BRS  | S774  | 0    | (swap adj instruction)<br>(hazard adj prevention)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 982 | BRS  | S707  | 1    | S706 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 983 | BRS  | S1022 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap near5 hazard) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 984 | BRS  | S571  | 15   | (consecutive near2 swap\$4)<br>and clock                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 985 | BRS  | S1019 | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap RAW              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 986 | BRS  | S574  | 528  | 712/216.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 987 | BRS  | S575  | 600  | 712/218.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |

|     | Type | Ref # | Hits | Search Text  | DBs  |
|-----|------|-------|------|--|--|
| 988 | BRS  | S573  | 3180 | 712/216,218,219,225,226,228,<br>229.ccls.                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 989 | BRS  | S570  | 8    | consecutive adj swap\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 990 | BRS  | S572  | 1    | (consecutive near2 swap\$4)<br>same clock                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 991 | BRS  | S716  | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 992 | BRS  | S754  | 413  | S753 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 993 | BRS  | S743  | 2142 | S742 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 994 | BRS  | S744  | 585  | S743 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 995 | BRS  | S1123 | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 996 | BRS  | S656  | 585  | S655 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |

|      | Type | Ref # | Hits | Search Text                                       | DBs  |
|------|------|-------|------|---|--|
| 997  | BRS  | S773  | 113  | S772 thread\$2                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 998  | BRS  | S576  | 354  | 712/219.ccls.                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 999  | BRS  | S655  | 2142 | S654 register                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1000 | BRS  | S612  | 413  | S611 delay\$4                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1001 | BRS  | S652  | 0    | (swap adj instruction)<br>(hazard adj prevention) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1002 | BRS  | S599  | 160  | (first adj swap)                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1003 | BRS  | S611  | 514  | S610 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1004 | BRS  | S608  | 2411 | processor pipeline swap                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1005 | BRS  | S609  | 2142 | S608 register                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1006 | BRS  | S610  | 585  | S609 restore                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |

|      | Type | Ref # | Hits | Search Text   | DBs  |
|------|------|-------|------|---|--|
| 1007 | BRS  | S578  | 486  | 712/226.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 1008 | BRS  | S585  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1009 | BRS  | S587  | 2142 | S585 register   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1010 | BRS  | S1023 | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1011 | BRS  | S667  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1012 | BRS  | S673  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1013 | BRS  | S580  | 364  | 712/229.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 1014 | BRS  | S660  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 1015 | BRS  | S581  | 1    | swap.clm. and restore.clm.<br>and save.clm. and<br>pipeline.clm. and clock.clm. | US-PGPUB   |

|          | Type | Ref # | Hits | Search Text   | DBs  |
|----------|------|-------|------|---|--|
| 101<br>6 | BRS  | S582  | 22   | (TAM.in. and KENWAY.in.) or<br>(KANT.in. and SHREE.in.)               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 101<br>7 | BRS  | S583  | 5    | ((TAM.in. and KENWAY.in.) or<br>(KANT.in. and SHREE.in.))<br>and swap | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 101<br>8 | BRS  | S588  | 585  | S587 restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 101<br>9 | BRS  | S579  | 709  | 712/228.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 102<br>0 | BRS  | S577  | 672  | 712/225.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 102<br>1 | BRS  | S658  | 413  | S657 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 102<br>2 | BRS  | S1074 | 0    | (swap adj instruction) save<br>restore hazard                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 102<br>3 | BRS  | S1075 | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |



|          | Type | Ref # | Hits | Search Text  | DBs                                      |
|----------|------|-------|------|--|--|
| 102<br>4 | BRS  | S1076 | 36   | (swap adj instruction) save<br>restore                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102<br>5 | BRS  | S1079 | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102<br>6 | BRS  | S1080 | 1    | (swap near5 save) (swap<br>near5 restore) RAW                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102<br>7 | BRS  | S689  | 514  | S688 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102<br>8 | BRS  | S752  | 585  | S751 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 102<br>9 | BRS  | S753  | 514  | S752 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103<br>0 | BRS  | S642  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103<br>1 | BRS  | S715  | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103<br>2 | BRS  | S703  | 359  | S690 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103<br>3 | BRS  | S943  | 514  | S942 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 103<br>4 | BRS  | S944  | 413  | S943 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|          | Type | Ref # | Hits | Search Text   | DBs  |
|----------|------|-------|------|---|--|
| 103<br>5 | BRS  | S654  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 103<br>6 | BRS  | S841  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 103<br>7 | BRS  | S847  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 103<br>8 | BRS  | S1030 | 585  | S1029 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 103<br>9 | BRS  | S1031 | 514  | S1030 save  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 104<br>0 | BRS  | S1010 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 104<br>1 | BRS  | S924  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 104<br>2 | BRS  | S589  | 514  | S588 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |
| 104<br>3 | BRS  | S584  | 3    | ((TAM.in. and KENWAY.in.) or<br>(KANT.in. and SHREE.in.))<br>and swap.clm.      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 104<br>4 | BRS  | S692  | 359  | S658 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB                                   |

|      | Type | Ref # | Hits | Search Text   | DBs                                      |
|------|------|-------|------|---|--|
| 1045 | BRS  | S648  | 339  | (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1046 | BRS  | S614  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1047 | BRS  | S634  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1048 | BRS  | S632  | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1049 | BRS  | S635  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1050 | BRS  | S641  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1051 | BRS  | S594  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1052 | BRS  | S745  | 514  | S744 save   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1053 | BRS  | S746  | 413  | S745 delay\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1054 | BRS  | S1034 | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1055 | BRS  | S1084 | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|      | Type | Ref # | Hits | Search Text   | DBs                                      |
|------|------|-------|------|---|--|
| 1056 | BRS  | S1093 | 359  | S1032 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1057 | BRS  | S832  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1058 | BRS  | S696  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1059 | BRS  | S615  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1060 | BRS  | S712  | 0    | (swap adj instruction) save<br>restore hazard                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1061 | BRS  | S714  | 36   | (swap adj instruction) save<br>restore  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1062 | BRS  | S733  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1063 | BRS  | S1015 | 413  | S1014 delay\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1064 | BRS  | S1036 | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1065 | BRS  | S1119 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1066 | BRS  | S901  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|          | Type | Ref # | Hits | Search Text   | DBs                                      |
|----------|------|-------|------|---|--|
| 106<br>7 | BRS  | S953  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 106<br>8 | BRS  | S1060 | 0    | (swap adj instruction)<br>(hazard adj prevention)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 106<br>9 | BRS  | S738  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>0 | BRS  | S914  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>1 | BRS  | S650  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW).                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>2 | BRS  | S813  | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>3 | BRS  | S831  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>4 | BRS  | S711  | 0    | (swap adj instruction)<br>(hazard adj prevention)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>5 | BRS  | S772  | 359  | S771 (clock adj cycle\$2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>6 | BRS  | S706  | 113  | S692 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 107<br>7 | BRS  | S750  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|      | Type | Ref # | Hits | Search Text  | DBs                                      |
|------|------|-------|------|--|--|
| 1078 | BRS  | S751  | 2142 | S750 register  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1079 | BRS  | S713  | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1080 | BRS  | S1124 | 1    | (swap near5 save) (swap<br>near5 restore) RAW                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1081 | BRS  | S1127 | 160  | (first adj swap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1082 | BRS  | S1133 | 0    | (swap adj instruction) save<br>restore (WAR OR RAW)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1083 | BRS  | S1136 | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1084 | BRS  | S586  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1085 | BRS  | S1082 | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1086 | BRS  | S1001 | 0    | (swap adj instruction)<br>(hazard adj prevention)                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1087 | BRS  | S1002 | 339  | (swap adj instruction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1088 | BRS  | S1003 | 0    | (swap adj instruction) save<br>restore hazard                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|      | Type | Ref # | Hits | Search Text   | DBs                                      |
|------|------|-------|------|---|--|
| 1089 | BRS  | S984  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1090 | BRS  | S991  | 2411 | processor pipeline swap   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1091 | BRS  | S992  | 113  | S978 thread\$2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1092 | BRS  | S1099 | 712  | swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1093 | BRS  | S1117 | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1094 | BRS  | S1118 | 1566 | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) swap                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1095 | BRS  | S1134 | 0    | (swap adj instruction) save<br>restore hazard                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1096 | BRS  | S616  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1097 | BRS  | S618  | 1    | S617 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1098 | BRS  | S705  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1099 | BRS  | S708  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|      | Type | Ref # | Hits | Search Text  | DBs                                      |
|------|------|-------|------|--|--|
| 1100 | BRS  | S709  | 1    | S704 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1101 | BRS  | S824  | 1    | S731 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1102 | BRS  | S820  | 1    | S819 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1103 | BRS  | S734  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1104 | BRS  | S763  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1105 | BRS  | S805  | 1    | S773 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1106 | BRS  | S825  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1107 | BRS  | S827  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1108 | BRS  | S826  | 1    | S783 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1109 | BRS  | S830  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1110 | BRS  | S872  | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |



|          | Type | Ref # | Hits | Search Text   | DBs                                      |
|----------|------|-------|------|---|--|
| 111<br>1 | BRS  | S903  | 1    | "6900668".PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>2 | BRS  | S828  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>3 | BRS  | S905  | 1    | S902 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>4 | BRS  | S933  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>5 | BRS  | S748  | 160  | (first adj swap)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>6 | BRS  | S1016 | 359  | S1015 (clock adj cycle\$2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>7 | BRS  | S722  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 hazard)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>8 | BRS  | S995  | 1    | S992 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 111<br>9 | BRS  | S993  | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>0 | BRS  | S720  | 432  | pipeline\$2 ((out-of-order)<br>or (out near2 order)) swap<br>RAW                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>1 | BRS  | S913  | 0    | pipeline\$2 ((out-of-order)<br>or (out near\$2 order)) (swap<br>near5 conflict) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|          | Type | Ref # | Hits | Search Text  | DBs                                      |
|----------|------|-------|------|--|--|
| 112<br>2 | BRS  | S719  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.ab.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>3 | BRS  | S727  | 585  | S726 restore   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>4 | BRS  | S1000 | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>5 | BRS  | S1091 | 1    | S1059 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>6 | BRS  | S1021 | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>7 | BRS  | S1047 | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>8 | BRS  | S1107 | 1    | S1105 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 112<br>9 | BRS  | S1109 | 1    | S1017 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>0 | BRS  | S1112 | 1    | S1069 swap.AB.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>1 | BRS  | S1111 | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>2 | BRS  | S1113 | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|          | Type | Ref # | Hits | Search Text  | DBs                                      |
|----------|------|-------|------|--|--|
| 113<br>3 | BRS  | S598  | 4    | S590 swap.AB.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>4 | BRS  | S600  | 10   | S599 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>5 | BRS  | S1114 | 1    | (swap near5 save) (swap<br>near5 restore) (RAW or WAR)                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>6 | BRS  | S1116 | 1    | "6900668".PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>7 | BRS  | S595  | 49   | S594 processor pipeline  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>8 | BRS  | S596  | 7    | S595 hazard\$2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 113<br>9 | BRS  | S929  | 0    | pipeline\$2 ((out-of-order)<br>or (out near2 order))<br>(swap.AB.) RAW | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 114<br>0 | BRS  | S597  | 7    | S595 (sam\$2 adj register)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 114<br>1 | BRS  | S602  | 5    | (register adj swaps)<br>pipeline                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 114<br>2 | BRS  | S601  | 28   | (register adj swap) pipeline   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 114<br>3 | BRS  | S603  | 4    | S590 (swap adj instruction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |

|      | Type | Ref # | Hits | Search Text                                  | DBs                                      |
|------|------|-------|------|--|--|
| 1144 | BRS  | S605  | 4    | (register adj swap\$2).AB.                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1145 | BRS  | S604  | 87   | (register adj swap\$2)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1146 | BRS  | S606  | 18   | S604 ((out-or-order) or (out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1147 | BRS  | S607  | 19   | S604 ((out-of-order) or (out near\$2 order)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1148 | BRS  | S620  | 7    | S619 hazard\$2                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1149 | BRS  | S621  | 7    | S619 (sam\$2 adj register)                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1150 | BRS  | S622  | 4    | S612 swap.AB.                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1151 | BRS  | S619  | 49   | S614 processor pipeline                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |
| 1152 | BRS  | S623  | 10   | S615 processor pipeline                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>IBM_TDB |